

ABSTRACT

AIM & OBJECTIVES

- To study the various clinical presentations of primary vaginal hydrocele.
- To compare the efficacy of Sharma & Jhaver's surgery Vs Lord's plication for small sized uncomplicated primary vaginal hydrocele (<7cms)
- To compare the efficacy of Sharma & Jhaver's surgery Vs Jaboulay's for medium sized uncomplicated primary vaginal hydrocele (>7cms and <14cms)
- To assess postoperative complications, morbidity associated with the above surgical procedures.
- To analyze the simplicity, expenditure & effectiveness of the three procedures.

DESIGN OF STUDY

- Randomized prospective comparative Study
- Simple Randomization
- Sample Size
 - Epi info software
 - Time taken to revert back to normal taken as mean
 - SD 1.7 and 1.36 for respective procedure
 - Confidence interval 95% and Power 80%
 - 23 rounder off to in each group
- Duration
 - 2 Years (June 2016 to May 2018)

Ref – “COMPARATIVE STUDY OF LORD’S PLICATION WITH
SHARMA JHAWER’S OPERATION IN THE TREATMENT OF
PRIMARY VAGINAL HYDROCELE”

COMPARTMENTS OF THE STUDY

- The study was done in two compartments to assess the efficacy of Sharma and Jhaver's for both small and medium sized primary vaginal hydrocele
- Hydrocele size < 7 cms diameter are considered as small sized hydrocele and are included in compartment I
- In compartment I Sharma & Jhaver's technique was compared with the Lord's Plication procedure for small sized hydrocele
- Hydrocele size >7 cms and <14 cms diameter are considered as medium sized hydrocele and are included in compartment II
- In compartment II Sharma & Jhaver's technique was compared with Jaboulay's procedure for medium sized hydrocele
- Size measured using Vernier's Caliper

STATISTICAL ANALYSIS

- Data entered into Microsoft Excel (Windows 7; Version 2007)
- Analyses done using the Statistical Package for Social Sciences (SPSS) for Windows software (trial version 22.0; SPSS Inc, Chicago)
- Descriptive statistics
 - **Mean and Standard Deviation** (SD) for continuous variables
 - **Frequencies and percentages** will be calculated for categorical variable
- Comparison between groups analyzed using
 - **Chi square test** of independence and **Fischer's test** for categorical variables
 - **Unpaired T test** for quantitative variables
- **Bar charts** and **Pie charts** for visual representation of analysed data
- Level of significance set at **0.05**

STUDY POPULATION

- All patients with primary vaginal hydrocele satisfying eligibility criteria admitted for surgery in the surgical ward of Government Rajaji hospital / Madurai Medical College during the study period of June 2016 to May 2018.

ELIGIBILITY CRITERIA

INCLUSION CRITERIA

- ✓ Solitary swelling in the scrotum incorporating the testis.
- ✓ The swelling should be positive for trans-illumination.
- ✓ It should be possible to get above the swelling at the root of scrotum.
- ✓ Hydrocele size < 7cms diameter are considered as small sized hydrocele and are included in compartment I
- ✓ Hydrocele size between 7 to 14 cms diameter are considered as medium sized hydrocele and are included in compartment II
- ✓ In a patient with bilateral hydrocele each hydrocele will be considered as a separate case in this study.

ELIGIBILITY CRITERIA

EXCLUSION CRITERIA

- ✓ Swelling arising from the skin of scrotum.
- ✓ Solitary swelling in the scrotum which is separate from the testis.
- ✓ Diffuse swelling in the scrotum incorporating the testis but negative on trans-illumination. (All secondary long standing complicated hydrocele are ruled out of the study).
- ✓ Swelling in which there is associated impulse on coughing and reducibility

END POINT

- The primary end point was once the testis returned back to normal size
- The secondary end points were hematoma, infection and wound disruption.
- So the follow up period was different for every patient
- Which varied from 8 to 28 days

KEY WORDS

Hydrocele, Primary vaginal hydrocele, Lord's plication, Sharma and Jhaver's procedure, Jaboulay's operation. Randomized prospective comparative study

CONCLUSION

➤ **Between the three procedures analyzed, in our setting Sharma and Jhawer's minimal dissection technique had statistically significant**

✓ **lesser complications,**

✓ **lesser time to revert back to normal and**

✓ **cost effective**

than Lord's plication for small sized primary vaginal hydrocele and Jaboulay's operation for medium sized primary vaginal hydrocele.

➤ **Hence Sharma Jhawer's is most beneficial for the patient and with least complications for treating small and medium sized primary vaginal hydrocele.**

➤ **Further multi centric randomized trials and meta-analysis are needed to emphasize the significance of the results in our study.**